



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/689,130

10/20/2003

Erik J. Shahoian

IMM151

3894

34300 7590 12/14/2010

PATENT DEPARTMENT (51851)
KILPATRICK STOCKTON LLP
1001 WEST FOURTH STREET
WINSTON-SALEM, NC 27101

EXAMINER

HOLTON, STEVEN E

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

12/14/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIK J. SHAHOIAN and ALEXANDER JASSO

Appeal 2009-005216
Application 10/689,130
Technology Center 2600

Before JOSEPH F. RUGGIERO, CARLA M. KRIVAK, and BRADLEY W.
BAUMEISTER, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL¹

STATEMENT OF THE CASE

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 1-19, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Appeal Brief (filed October 17, 2007) and the Answer (mailed January 9, 2008) for the respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Brief have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants' Invention

Appellants' invention relates to providing rotational haptic feedback to a touch-sensitive input device having a rotary degree of freedom. More particularly, an actuator is configured to produce a rotational force on the touch-sensitive input device. (*See generally* Spec. ¶¶ [0006]-[0007]).

Claim 1 is illustrative of the invention and reads as follows:

1. A system comprising:
a touch-sensitive input device configured to move in a rotary degree of freedom; and
an actuator configured to produce a rotational force on the touch-sensitive input device.

The Examiner's Rejection

The Examiner's Answer cites the following prior art references:

Rosenberg	US 6,128,006	Oct. 3, 2000
Shahoian	US 2002/0033795 A1	Mar. 21, 2002

Claims 1-19, all of the appealed claims, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shahoian in view of Rosenberg.

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966) (stating that 35 U.S.C. § 103 leads to three basic factual inquiries: the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the art). Furthermore,

‘there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

KSR Int’l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

ANALYSIS

Appellants’ arguments with respect to appealed independent claims 1, 14, and 17 do not attack the Examiner’s rationale for combining Shahoian and Rosenberg but, rather, contend that the resultant combination would not satisfy the claimed requirements. In particular, Appellants contend (App.

Br. 4-5) that neither Shahoian nor Rosenberg, taken alone or in combination, discloses a “touch-sensitive input device configured to move in a rotary degree of freedom,” a feature present in each of claims 1, 14, and 17.

According to Appellants (*id.*), Shahoian, while disclosing a touchpad that is configured to move *laterally* in x and y directions to provide haptic feedback to a user, has no teaching or suggestion of configuring the touchpad to move in a *rotary* degree of freedom. Appellants further contend that Rosenberg, which discloses that haptic feedback is provided to a user who rotates an input mouse “wheel” to provide an input signal, does not overcome the deficiency of Shahoian since Rosenberg’s mouse “wheel” is not a *touch-sensitive* input device as claimed.

We do not agree with Appellants. Initially, we find Appellants’ arguments unpersuasive since they attack the individual differences between each of Shahoian and Rosenberg and the claimed invention. The Examiner’s rejection, however, is based on the *collective* teachings of the applied references, and not Shahoian and Rosenberg individually. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Further, we find ample evidence within the disclosures of Shahoian and Rosenberg to support the Examiner’s ultimate determination of the obviousness of the claimed invention, i.e., the collective teachings of Shahoian and Rosenberg would result in a touch-sensitive device configured to move in a rotary degree of freedom. As pointed out by the Examiner (Ans. 3), both Shahoian and Rosenberg disclose the provision of haptic feedback as an opposing force to movement of an input device, and both references teach providing *rotational* tactile forces to a user. (Shahoian, ¶ [0092]; Rosenberg, col. 8, ll. 15-27).

While Rosenberg's particular disclosure of rotational force feedback to an input device that moves with a rotary degree of freedom is directed to a rotary "wheel" of a mouse input device, i.e., not a *touch-sensitive* device as argued by Appellants, Shahoian teaches the advantages of replacing space consuming input devices such as mice with touch-sensitive touchpad input devices. (Shahoian, ¶ [0005]). Similarly, Rosenberg suggests that providing rotational tactile forces to an input device that moves with a rotary degree of freedom, such as the rotary wheel of a mouse, can also be applied to other input devices such as the touch-sensitive input device of Shahoian. (Rosenberg, col. 7, ll. 35-46).

Discussing the obviousness of claimed combinations of elements of prior art, *KSR* explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. *Ag Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

KSR, 550 U.S. at 417.

In view of the above discussion, we find that Appellants have not demonstrated any error in the Examiner's determination of obviousness based on the collective teachings of Shahoian and Rosenberg. Accordingly, the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1, 14,

Appeal 2009-005216
Application 10/689,130

and 17, as well as dependent claims 2-13, 15, 16, 18, and 19 not separately argued by Appellants, is sustained.

CONCLUSION OF LAW

Based on the analysis above, we conclude that the Examiner did not err in rejecting claims 1-19 for obviousness under 35 U.S.C. § 103(a).

DECISION

We affirm the Examiner's decision rejecting claims 1-19 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v) (2009).

AFFIRMED

gvw

PATENT DEPARTMENT (51851)
KILPATRICK STOCKTON LLP
1001 WEST FOURTH STREET
WINSTON-SALEM NC 27101